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MORBIDITY AND MORTALITY WEEKLY REPORT

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Cluster of HIV-Infected Adolescents and Young Adults — Mississippi, 1999

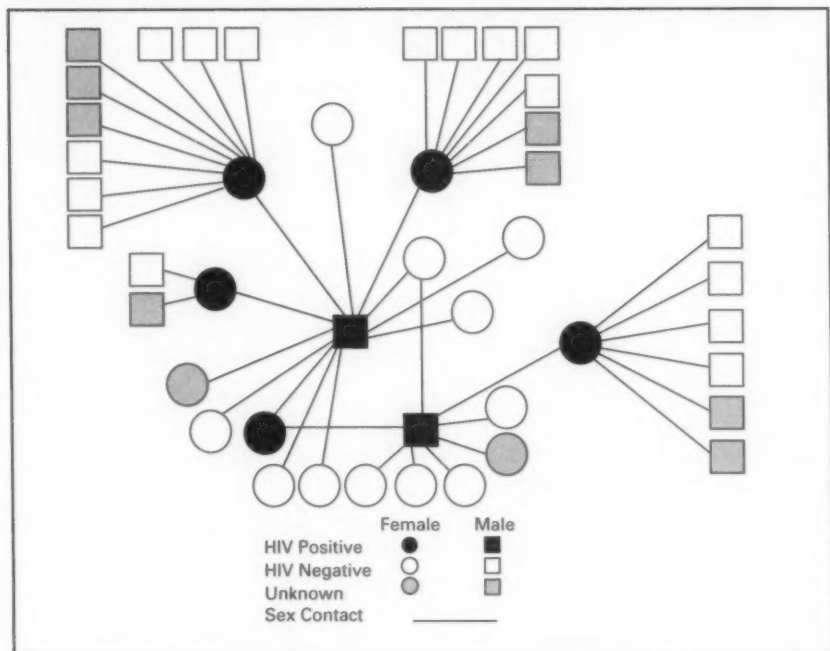
From February through June 1999, seven human immunodeficiency virus (HIV)-infected young persons were identified in a small town in rural Mississippi. Two persons were identified through routine voluntary HIV testing during sexually transmitted disease (STD) evaluations, and five were identified subsequently through contact investigation by the local health department. Contact investigation identified sex partners and social contacts (i.e., persons who shared social surroundings) and defined a social network of 122 sex and social contacts. Seven (9%) of 78 persons tested from the social network were HIV-infected. Within the social network, a sexual contact network of 44 persons (the seven HIV-infected persons and their sex partners) was identified. The Mississippi State Department of Health asked CDC to join the investigation to describe further the cluster and help direct prevention efforts. This report summarizes the investigation of this cluster and underscores the need for HIV prevention and treatment in rural areas.

HIV-infected persons and uninfected sex partners were interviewed, and a case-control analysis was performed to assess risk factors for infection. Uninfected female social contacts who had not had sex with the infected men also were interviewed and compared with the HIV-infected women to assess risk factors for exposure. Kruskal-Wallis (KW) and Fischer exact (FE) statistical tests were used. For HIV-infected persons, sensitive-less sensitive detuned assays (1) were performed to identify persons probably infected within 180 days of diagnosis, and CD4+ cell counts and plasma HIV-1 RNA levels were measured to identify need for treatment. Questionnaires were mailed to local internists and family practitioners to establish HIV care patterns and practices in the area.

Persons in the sex network (Figure 1) had a median age of 21 years (range: 13–45 years), and all were black. The network was located in an economically depressed neighborhood with few organized social activities. Interviews with the seven HIV-infected persons (five women) and 22 uninfected sex partners (10 women) indicated that HIV was acquired locally through heterosexual contact. Of the 29 persons, 15 (52%, [four infected and 11 uninfected]) had a history of other STDs, and 28 (97%) reported multiple lifetime sex partners. Three of five infected women had STD co-infection when HIV was diagnosed. Factors associated with HIV infection in the five women were young age (median: 16 years, compared with 25 years for the infected men [KW $p=0.05$] and 20.5 years for the uninfected women [KW $p=0.04$]); a stated preference for “much older” sex partners (three of five infected women compared with one of 10 uninfected women

Sex Network — Continued

FIGURE 1. Sex network of seven persons with HIV infection — Mississippi, 1999



[FE $p=0.08$]; and having had a sex partner who was at least 10 years older (three of four responding infected women compared with two of 10 uninfected women [FE $p=0.09$]). Infected persons also began engaging in sex at a younger age (median: 13 years; range: 11–14 years compared with uninfected persons, median: 14.5 years, range: 12–17 years; [KW $p=0.08$]). Alcohol use, drug use, and exchange of sex for alcohol, drugs, or money were not associated with HIV infection in this cluster.

Interviews with seven uninfected female social contacts indicated they were similar to the infected women in age (median: 18 years for the social contacts). Common characteristics of infected women and social contacts included low socioeconomic status (seven of 12 women received federal aid), absentee fathers (nine of 12 persons), truancy (six of nine persons in school), and school failure (six of 12 persons having repeated at least 1 year in school). No social contacts reported having had sex partners that were ≥ 10 years older than themselves compared with three of the four infected women who responded.

Laboratory results and medical histories indicated that antiretroviral therapy was recommended in all infected persons (2). Two persons had seen a doctor since HIV infection was diagnosed. Five of seven persons did not know treatment for HIV infection existed. Of five persons who remembered being referred to care on diagnosis, all were referred to a facility >2 hours away, and one had been seen at that facility. The six remaining persons were willing to be linked to care once they knew HIV care was available locally.

Sex Network — Continued

Survey responses were received from five of six internists and two of six family practitioners. Of the seven responding physicians, one cared for approximately 60 HIV-infected persons and was the only one who reported practices consistent with guidelines for monitoring and treating asymptomatic persons. The others had provided ongoing care to <10 HIV-infected persons; most reported referring persons for care because they lacked experience in HIV treatment.

Reported by: State health officers, state epidemiologist, district health officers, and disease intervention specialists, Mississippi State Dept of Health. Div of Applied Public Health Training, Epidemiology Program Office; Div of HIV/AIDS Prevention-Intervention Research and Support, and Div of HIV/AIDS-Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention; and EIS officers, CDC.

Editorial Note: The findings in this report suggest that STDs and multiple sex partners in small town sex networks provide a setting for the transmission of HIV among adolescents in the rural South. HIV infection can spread rapidly through sex networks in low-prevalence rural areas (3). Among adolescents, disadvantaged black women in the South have some of the highest HIV infection rates in the United States and must be a high priority for prevention activities (4).

The method by which persons in this cluster were identified underscores the importance of providing routine voluntary HIV counseling and testing services during STD evaluations. In addition, partner counseling and referral services can be especially useful for identifying partners in need of prevention services and for identifying the extent of the HIV-infection network. This cluster also highlights the challenges of service delivery in a rural area with limited HIV prevention and treatment resources.

The age-discrepant relations in this cluster have implications for both HIV transmission and primary prevention programs. Adult partners contribute substantially to STDs and pregnancies among teenagers (5). Young women are at risk for HIV infection at an earlier age than are heterosexual men, probably because the women are infected by older sex partners (6). Age difference also may affect adolescents' abilities to negotiate safer sex and condom use. Prevention efforts should address age-discrepant relationships.

Secondary prevention measures, such as links to ongoing HIV care and antiretroviral therapy, can improve health and survival and potentially decrease, although not eliminate, infectivity. Following this investigation, efforts to link HIV-infected persons to care have been extended in this health district. Challenges to secondary prevention in rural areas include awareness of treatment options and identification and training of appropriate local HIV care providers.

In this cluster, identification of a qualified local care provider facilitated linkage to care and provided a potential point of coordination for social work, mental health care, and case-management services by the local health department. Where no experienced HIV care provider exists, identifying a practitioner willing to accept this role and to develop an ongoing relationship with a remote consultant would be an alternative.

References

1. Janssen RS, Satten GA, Stramer SL, et al. New testing strategy to detect early HIV-1 infection for use in incidence estimates and for clinical and prevention purposes. *JAMA* 1998;280:42-8.
2. CDC. Report of the NIH panel to define principles of therapy of HIV infection and guidelines for the use of antiretroviral agents in HIV-infected adults and adolescents. *MMWR* 1998;47(no. RR-5). Available at <http://www.hivatis.org>. Accessed January 28, 2000.

Sex Network — Continued

3. CDC. Cluster of HIV-positive young women—New York, 1997–1998. *MMWR* 1999;48:413–6.
4. Valleroy LA, MacKellar DA, Karon JM, Janssen RS, Hayman CR. HIV infection in disadvantaged out-of-school youth: prevalence for U.S. Job Corps entrants, 1990–1996. *J Acquir Immune Defic Syndr Hum Retrovirol* 1998;19:67–73.
5. Males MA. Adult involvement in teenage childbearing and STD. *Lancet* 1995;346:64–5.
6. Wortley PM, Fleming PL. AIDS in women in the United States: recent trends. *JAMA* 1997;278:911–6.

Nutritional Assessment of Adolescent Refugees — Nepal, 1999

During 1990–1993, 83,000 ethnic Nepalese fled from Bhutan to refugee camps in southeast Nepal after new citizenship policies were enacted by the Bhutanese government. Although annual nutrition surveys of children aged <5 years had been conducted by international agencies, no anthropometric assessment of adolescents had been performed since the refugees arrived in 1990. After withdrawal of a fortified cereal from their rations, the number of reported cases of angular stomatitis (AS) (i.e., thinning and/or fissuring at the angles of the mouth, a sign of possible vitamin deficiency) increased six-fold during December 1998–March 1999 (from 5.5 to 35.6 cases per 1000 refugees) (Santa Tamang, MD, Save the Children Fund, United Kingdom, personal communication, 1999). The highest rates of AS were found among children and adolescents. In October 1999, CDC was invited by the World Food Programme and the United Nations High Commissioner for Refugees to assess the health status of adolescent refugees. This report summarizes the investigation, which indicated a high prevalence of low body mass index (BMI), anemia, low vitamin A status, and signs of micronutrient deficiencies among adolescent refugees.

The nutritional status of a sample of refugees aged 10–19 years was assessed using anthropometry, hemoglobin measurement, laboratory testing, and a limited physical examination. Height was measured to 0.04 inches (1 mm) using 6.9 foot (2 m) height boards, and weight was measured to the nearest 3.5 ounces (100 g) using digital bathroom scales. BMI was defined as weight (in kilograms)/(height² [in meters]). Low BMI was determined by comparing a person's BMI to that of persons of similar age and same sex in the World Health Organization (WHO) adolescent reference population (1). A fingerstick blood sample was collected to determine hemoglobin concentration using a hemoglobinometer. Anemia was defined according to WHO criteria (2). From half the participants, serum was collected by venipuncture for retinol (vitamin A) testing by high performance liquid chromatography (3,4). A retinol level <20 µg/dL was considered low (3).

Participants aged 10–19 years were chosen by systematic random sampling from camp registration data of 26,235 adolescents; 400 were needed to generate prevalence estimates for low BMI and anemia. An additional 20% were chosen to ensure an adequate sample after accounting for persons who could not be located or who refused to participate. Data were analyzed using EpiInfo version 6.04b. Chi-square or Fisher's exact tests were used to compare data. For point estimates of prevalence rates, 95% confidence intervals (CIs) were calculated by the quadratic method.

Of the 495 selected adolescents, 463 (94%) were enrolled; 236 (51%) were female, 253 (55%) were aged 15–19 years, and 167 (36%) (95% CI=32%–41%) had low BMI. Boys were twice as likely as girls to have low BMI (48% versus 24%; $p<0.01$), and participants

Nutrition Assessment — Continued

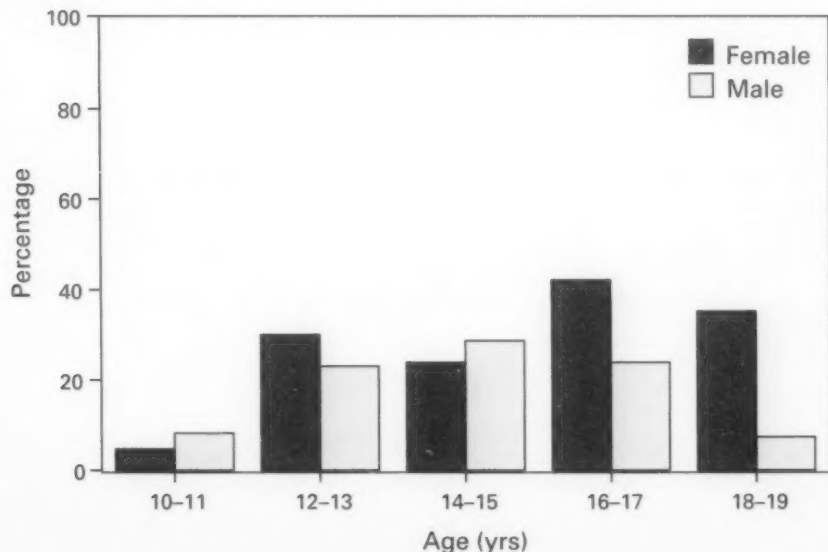
aged 10–14 years were 1.7 times as likely to have low BMI as those aged 15–19 years (64% versus 37%; $p < 0.001$). The prevalence of low BMI declined with age among both sexes; however, this decline was substantially more rapid among girls.

Among the 458 participants who reported no recent iron tablet supplementation, 111 (24%) (95% CI=20%–28%) were anemic. The mean and median hemoglobin values were both 13.0 g/dL (standard deviation [SD]=1.7). The prevalence of anemia among girls who received no iron supplementation increased sharply after age 11 years; 33% of girls aged ≥ 12 had anemia, peaking at age 16–17 years (Figure 1) (trend test, $p=0.05$); 49 (37%) of 134 girls who reported having experienced menarche had anemia compared with 17 (17%) of 99 who had not ($p=0.001$). The prevalence of anemia among boys peaked at age 14–15 years and then decreased with age (Figure 1).

Among the 190 participants assessed, 49 (26%) (95% CI=23%–30%) had retinol levels that suggested low vitamin A status. The mean retinol level was 24 $\mu\text{g/dL}$ (SD=6.8) and the median was 23 $\mu\text{g/dL}$. Two participants (1%) had serum retinol values $< 10 \mu\text{g/dL}$. Low serum retinol status was unrelated to age or sex.

On physical examination, participants showed signs of possible micronutrient deficiencies; 133 (29%) of 463 participants had AS. One participant had spontaneous gum bleeding and 27 (6%) had gums that bled upon touch. Tingling or burning in the hands or feet during the 30 days preceding the investigation was reported by 41% of the participants. Although severe goiter from iodine deficiency was not found on physical examination, three participants had a grade I goiter and one had a grade II goiter (5).

FIGURE 1. Prevalence of anemia among adolescent refugees, by age and sex — Nepal, 1999



Nutrition Assessment — Continued

Reported by: World Food Programme, United Nations High Commissioner for Refugees, Save the Children Fund, United Kingdom. Div of Nutrition and Physical Activity, National Center for Chronic Disease Prevention and Health Promotion; Div of Emergency Environmental Health Svcs, and Div of Laboratory Sciences, National Center for Environmental Health; and an EIS Officer, CDC.

Editorial Note: In 1992, a surveillance system was established in refugee camps in Nepal (6). This system allowed health-care providers to identify and report the increase in AS cases that led to this investigation.

Although low BMI was common among refugee adolescents, the prevalence of low BMI did not exceed that of adolescents from the general population of Nepal (7). Iron deficiency may affect up to two-thirds of pregnant women in developing countries and those who enter pregnancy with adequate iron stores are more likely to complete pregnancy without developing iron deficiency (8). The findings in this report indicate that adolescent female refugees in Nepal are at risk for iron deficiency.

The prevalence of low vitamin A status among participating adolescents was high. Persons aged 12–17 years may exhibit night vision problems when serum retinol levels are $<20 \mu\text{g/dL}$ (9). Few participants had detectable goiter probably because iodine deficiency was avoided as a result of the distribution of iodized salt.

The findings in this report are subject to at least three limitations. First, because the WHO reference population for evaluating BMI is based on data from the National Health and Nutrition Examination Survey of U.S. adolescents, the prevalence of low BMI among adolescent refugees in Nepal may be overestimated (10). Second, clinical evaluation for some micronutrient deficiencies has not been standardized. Third, the sensitivity and specificity of signs or symptoms of specific micronutrient deficiencies among adolescents has not been established.

On the basis of findings from this investigation, recommended nutritional improvements for adolescents in Nepal included distributing iron and folate supplements to girls, ensuring adequate vegetable oil fortification with vitamin A, continuing surveillance for signs of micronutrient deficiencies, and adding a fortified source of micronutrients to the food ration to increase daily nutrient consumption to international standards. Long-term recommendations included the support and expansion of vegetable production in camp gardens and the raising of poultry. Since this investigation, continued surveillance for signs of micronutrient deficiencies and expansion of vegetable production in camp gardens has occurred; the addition of whole lentils to the ration is planned.

References

1. World Health Organization Expert Committee on Physical Status. The use and interpretation of anthropometry. Geneva, Switzerland: World Health Organization Expert Committee on Physical Status, 1995; World Health Organization technical report series #854.
2. World Health Organization/United Nations Children's Fund. Consultation on iron deficiency: indicators and strategies for iron deficiency control programmes. Geneva, Switzerland: World Health Organization (in press).
3. World Health Organization. Indicators for assessing vitamin A deficiency and their application in monitoring and evaluating intervention programs. Geneva, Switzerland: World Health Organization, 1996.
4. Sowell AL, Huff DL, Yeager PR, Caudill SP, Gunter EW. Retinol, alpha-tocopherol, lutein/zeaxanthin, beta-cryptoxanthin, lycopene, alpha-carotene, trans-beta-carotene, and four retinyl esters in serum determined simultaneously by reversed-phase HPLC with multi-wavelength detection. *Clin Chem* 1994;40:411–6.

Nutrition Assessment — Continued

5. United Nations Children's Fund. Indicators for assessing iodine deficiency disorders and their control through salt iodization. New York, New York: United Nations Children's Fund, 1994.
6. CDC. Surveillance of the health status of Bhutanese refugees—Nepal, 1992. *MMWR* 1993;42:14–7.
7. Huijbers PM, Hendriks JL, Gerver WJ, De Jong PJ, De Meer K. Nutritional status and mortality of Highland children in Nepal: impact of sociocultural factors. *Am J Phys Anthropol* 1996;101:137–44.
8. Viteri FE. Prevention of iron deficiency. In: Howson CP, Kennedy ET, Horwitz A, eds. Prevention of micronutrient deficiencies: tools for policy makers and public health workers. Washington, DC: Institute of Medicine, National Academy Press, 1998.
9. Pilch SM. Assessment of the vitamin A nutritional status of the U.S. population based on data collected in the Health and Nutrition Examination Surveys. Bethesda, Maryland: Life Sciences Research Office, Federation of American Biological Societies, 1990.
10. Woodruff BA, Duffield A. Assessment of nutritional status in emergency-affected populations: adolescents. Report on the nutrition situation of refugees and displaced populations. Geneva, Switzerland: United Nations Agency Coordinating Committee Sub-Committee on Nutrition, 2000 (suppl 31).

Progress Toward Poliomyelitis Eradication — Ethiopia, 1997–August 2000

In 1988, the World Health Assembly resolved to eradicate poliomyelitis globally by 2000 (1). Following the signing of the Yaounde Declaration on Polio Eradication in Africa in 1996, Ethiopia joined global efforts toward polio eradication (2). Since then, Ethiopia has accelerated implementation of polio eradication strategies. This report summarizes progress toward polio eradication in Ethiopia during 1997–August 2000 and highlights the remaining challenges toward achieving the goal.

Routine Vaccination Coverage

During 1990–1999, reported coverage of children aged 0–11 months with 3 doses of oral poliovirus vaccine (OPV3) ranged from 20%–90%. The last comprehensive coverage survey conducted in 1995 estimated OPV3 coverage at 36%. Preliminary data from the 2000 Ethiopia Demographic and Health Survey estimates average OPV3 coverage at 35%.

Supplemental Vaccination Activities

In 1996, Ethiopia conducted Subnational Immunization Days* (SNIDs) for the first time, targeting 2.5 million children aged <5 years in nine major cities. Since then, the country has conducted two rounds of National Immunization Days[†] (NIDs) annually. Implementation of NIDs during 1997–1999 and SNIDs in 2000 has reached >90% of the target population (Table 1), including areas with limited access to routine health services. In 1999, intensified campaigns with delivery of vaccine house-to-house were conducted in three regions (Afar, Benshangul, and Somali) that had performed poorly in previous

*Focal mass campaigns in high-risk areas over a short period (days to weeks) in which two doses of OPV are administered to all children, usually aged <5 years, regardless of vaccination history, with an interval of 4–6 weeks between doses.

[†]Mass campaigns over a short period (days to weeks) in which two doses of OPV are administered to all children, usually aged <5 years, regardless of vaccination history, with an interval of 4–6 weeks between doses.

Poliomyelitis Eradication — Continued

years. As a result, 541,996 more children were reached in these regions compared with 1998 NIDs, which used only fixed-site vaccinations.

Despite improvements in vaccine delivery, pockets of unvaccinated children remain. During the 2000 house-to-house SNIDs, efforts were made to detect the proportion of children never vaccinated by routine services or during NIDs. Of children vaccinated during the 2000 SNIDs, an average of 25% (range: 1%–100%) had never received vaccine.

Acute Flaccid Paralysis Surveillance

Surveillance for acute flaccid paralysis (AFP) was initiated in 1997. During 1997–August 2000, the nonpolio AFP rate increased from 0.10 to 0.44 per 100,000 children aged <15 years (a sensitive system is defined as ≥ 1 per 100,000 children aged <15 years) (Table 2).

Surveillance performance among the 11 regions of Ethiopia varies substantially. Wild poliovirus isolates have been isolated in zones (subregional administrative units) where AFP surveillance is improving and reached nonpolio AFP levels >0.5. However, only 26 of Ethiopia's 71 zones have achieved this level; the more densely populated zones in central Ethiopia have nonpolio AFP rates <0.5, and 25 zones have not reported any AFP cases during 2000. These 25 zones also have very low (<20%) routine OPV3 coverage.

The proportion of adequate stool specimens from AFP case-patients (i.e., two stool specimens collected at an interval of at least 24 hours within 14 days of onset of paralysis and adequately shipped to the laboratory) has improved from 12% in 1998 to 44% in 2000 (Figure 1). All stool specimens routinely are split and tested in both the Ethiopia Health and Nutrition Research Institute (EHNRI) polio laboratory and the World Health Organization (WHO) accredited national laboratory in Uganda. The EHNRI polio laboratory is expected to attain WHO accreditation status by the end of 2000.

TABLE 1. Number of children reached by National Immunization Days (NIDs)* and Subnational Immunization Days (SNIDs)[†], by year — Ethiopia, 1997–August 2000

Round	1997 NIDs	1998 NIDs	1999 NIDs	2000 SNIDs [‡]
1st	7,298,158	8,898,733	11,031,878	391,419
2nd	8,278,216	9,682,220	11,263,862	402,808

* Mass campaigns over a short period (days to weeks) in which two doses of oral poliovirus are administered to all children, usually aged <5 years, regardless of vaccination history, with an interval of 4–6 weeks between doses.

[†] Focal mass campaigns in high-risk areas over a short period (days to weeks) in which two doses of OPV are administered to all children, usually aged <5 years, regardless of vaccination history, with an interval of 4–6 weeks between doses.

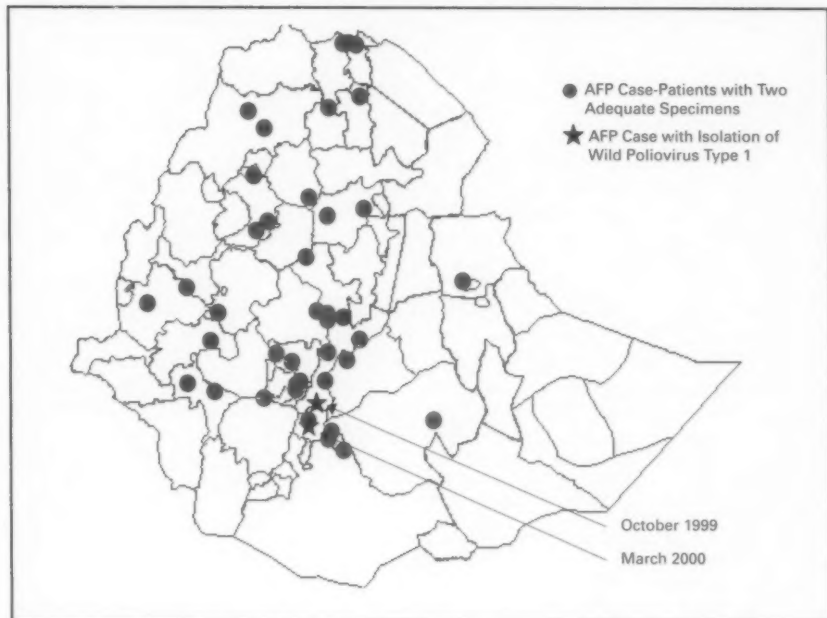
[‡] March–April SNIDs; NIDs are scheduled for November–December 2000.

TABLE 2. Key indicators for quality of acute flaccid paralysis (AFP) surveillance — Ethiopia, 1998–2000*

Year	No. AFP cases detected	% persons with stool samples within 14 days of paralysis onset	Nonpolio AFP rate [†]	Confirmed polio cases (virus confirmed)
1998	66	12%	0.30	55
1999	189	23%	0.28	131 (1)
2000	121	44%	0.44	55 (1)

* 2000 data as of August 28.

[†] Annual rate per 100,000 children aged <15 years.

*Poliomyelitis Eradication — Continued***FIGURE 1. Distribution of wild poliovirus isolates and acute flaccid paralysis (AFP) case-patients with adequate stool specimens — Ethiopia, January–August 2000***

* One person with a wild poliovirus isolate had onset of symptoms in October 1999.

Incidence of Polio

Until March 2000, AFP surveillance had not detected wild poliovirus in Ethiopia. In March 2000, the Johannesburg polio reference laboratory confirmed isolation of the first wild poliovirus type 1 (P1) in an AFP case from Oromia region with onset of paralysis in October 1999. A second isolate was reported in August 2000, with paralysis onset in March 2000. Neither of these virologically confirmed polio case-patients had received any doses of OPV. Genetic sequencing of polioviruses isolated from these cases revealed that they were indigenous to Ethiopia and unlike those polioviruses isolated in bordering countries.

Reported by: Ministry of Health, Addis Ababa, Ethiopia. Vaccine Preventable Diseases Unit, Regional Office for Africa, World Health Organization, Harare, Zimbabwe. Dept of Vaccines and Biologicals, World Health Organization, Geneva, Switzerland. Respiratory and Enteric Viruses Br, Div of Viral and Rickettsial Diseases, National Center for Infectious Diseases; Vaccine Preventable Disease Eradication Div, National Immunization Program, CDC.

Editorial Note: Rapid progress has been achieved in implementing polio eradication strategies in Ethiopia, one of the major polio reservoirs in the Africa Region (3). Recent improvements in AFP surveillance led to the detection of indigenous wild poliovirus transmission. In addition, the number of children reached by NIDs and SNIDs has increased annually. The house-to-house approach in parts of the country during 1999

Poliomyelitis Eradication — Continued

and 2000 resulted in increased coverage of children aged <5 years, especially in hard-to-reach areas.

Routine vaccination activities have been constrained by challenges related to program management, training, health sector reform, cold chain maintenance, a largely rural population, and difficult terrain. Low routine OPV3 coverage, suboptimal AFP surveillance, and indigenous wild poliovirus transmission underscore the need for continued high quality NIDs and extra SNIDs. House-to-house vaccination activities should continue to reach children residing in hard-to-reach areas who have never been vaccinated. A WHO-United Nations Children's Fund (UNICEF) technical review identified the need for an increased number of mid-level surveillance officers to assist in training, clinician sensitization, and supervision of active AFP surveillance in remote areas. The placement of mid-level surveillance officers in other countries has led to rapid improvement in AFP surveillance indicators.

Polio eradication priorities in Ethiopia include 1) implementing high-quality NIDs (planned for November and December 2000 and tentatively planned for 2001), 2) ensuring high-quality house-to-house vaccination campaigns in hard-to-reach areas, 3) strengthening routine vaccination, 4) strengthening facility-based active AFP surveillance to reach certification standards (nonpolio AFP rate of ≥ 1.0) in all zones, 5) supporting the national laboratory to attain WHO accreditation, and 6) coordinating cross-border vaccination and surveillance activities to detect possible importation of wild poliovirus from neighboring countries. Meeting these challenges will require the continued support of polio eradication partners.⁵

References

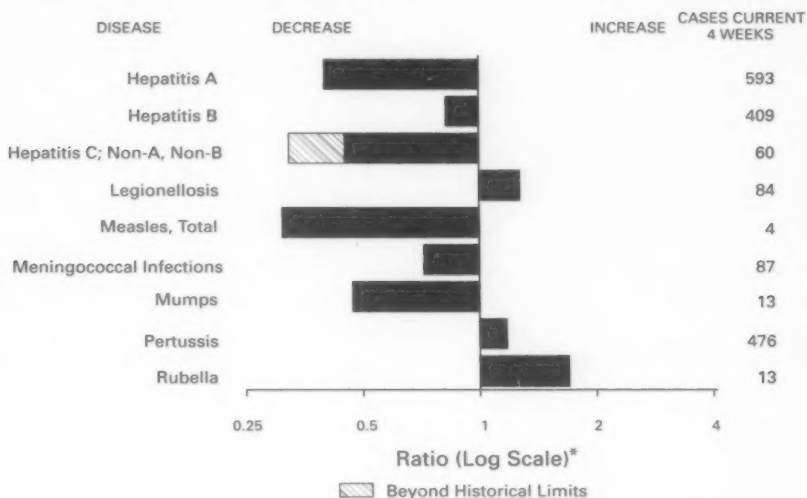
1. World Health Assembly. Global eradication of poliomyelitis by the year 2000: resolution of the 41st World Health Assembly. Geneva, Switzerland: World Health Organization, 1988 (resolution WHA 41.28).
2. Organization of African Unity. Yaounde declaration on polio eradication in Africa. In: Proceedings of the 32nd Ordinary Session of the Organization of African Unity meeting. Yaounde, Cameroon: Organization of African Unity, 1996; AHG/Declaration 1 (XXXII).
3. CDC. Progress toward poliomyelitis eradication—African Region, 1999–March 2000. *MMWR* 2000;49:445–9.

⁵ Polio eradication efforts in Ethiopia are supported by WHO, UNICEF, Rotary International, U.S. Agency for International Development, the Japanese International Cooperation Agency, the United Kingdom Department of Foreign and International Development, and CDC.

Notice to Readers

**2001 Symposium on Statistical Methods:
Issues Associated With Complicated Designs and Data Structures**

The Eighth Biennial Symposium on Statistical Methods, co-sponsored by CDC, the Agency for Toxic Substances and Disease Registry, and the Atlanta Chapter of American Statistical Association, will be held January 23–24, 2001, in Atlanta, Georgia. A short course, "Introduction to Mixed Models for Longitudinal Studies," will be offered January 22, along with the symposium. Presentations will include modeling and analysis of complicated data structures, issues related to sparse and massive data sets, data collection and storage, and use of software for exploratory and automated techniques. Registration and additional information about content of the symposium is available from the World-Wide Web, <http://www.cdc.gov/od/ads/sag>.

FIGURE 1. Selected notifiable disease reports, United States, comparison of provisional 4-week totals ending September 23, 2000, with historical data

* Ratio of current 4-week total to mean of 15 4-week totals (from previous, comparable, and subsequent 4-week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

TABLE 1. Summary of provisional cases of selected notifiable diseases, United States, cumulative, week ending September 23, 2000 (38th Week)

	Cum. 2000		Cum. 2000
Anthrax	-	HIV infection, pediatric* ¹	149
Brucellosis*	48	Plague	5
Cholera	1	Poliomyelitis, paralytic	-
Congenital rubella syndrome	6	Psittacosis*	8
Cyclosporiasis*	36	Rabies, human	-
Diphtheria	-	Rocky Mountain spotted fever (RMSF)	331
Encephalitis: California serogroup viral*	73	Streptococcal disease, invasive, group A	2,154
eastern equine*	-	Streptococcal toxic-shock syndrome*	62
St. Louis*	1	Syphilis, congenital ²	96
western equine*	-	Tetanus	17
Ehrlichiosis	-	Toxic-shock syndrome	117
human granulocytic (HGE)*	128	Trichinosis	6
human monocytic (HME)*	78	Typhoid fever	248
Hansen disease (leprosy)*	42	Yellow fever	-
Hantavirus pulmonary syndrome* ³	27		
Hemolytic uremic syndrome, postdiarrheal*	121		

-: No reported cases.

* Not notifiable in all states.

¹ Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases (NCID).

² Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention (NCHSTP). Last update August 27 2000.

³ Updated from reports to the Division of STD Prevention, NCHSTP.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending September 23, 2000, and September 25, 1999 (38th Week)

Reporting Area	AIDS		Chlamydia ¹		Cryptosporidiosis		Escherichia coli O157:H7*			
	NETSS		PHLIS							
	Cum. 2000 ²	Cum. 1999	Cum. 2000	Cum. 1999	Cum. 2000	Cum. 1999	Cum. 2000	Cum. 1999	Cum. 2000	Cum. 1999
UNITED STATES	26,662	32,187	456,722	477,627	1,571	1,884	3,262	2,608	2,143	2,054
NEW ENGLAND	1,428	1,673	15,505	15,403	66	134	297	323	287	301
Maine	25	55	1,040	779	17	19	24	31	25	-
N.H.	28	38	735	712	15	10	30	25	28	26
Vt.	20	13	384	349	20	30	28	24	30	14
Mass.	895	1,093	6,718	6,557	12	56	129	142	126	155
R.I.	63	75	1,810	1,670	2	2	11	24	12	24
Conn.	399	399	4,818	5,336	-	17	75	77	66	82
MID. ATLANTIC	5,921	8,283	41,087	48,628	107	336	317	196	138	93
Upstate N.Y.	637	950	N	N	73	104	218	139	38	-
N.Y. City	3,150	4,356	18,779	20,316	8	179	10	15	9	15
N.J.	1,202	1,554	5,806	8,954	6	26	88	42	31	51
Pa.	932	1,423	16,502	19,358	20	27	N	N	60	27
E.N. CENTRAL	2,480	2,294	74,124	79,979	511	509	730	774	422	399
Ohio	400	374	20,057	21,792	173	41	198	150	150	157
Ind.	254	257	9,287	8,798	41	32	107	65	69	46
Ill.	1,368	1,100	17,846	23,964	7	74	145	469	-	81
Mich.	331	454	18,565	15,566	77	40	104	90	76	71
Wis.	127	109	8,369	9,859	213	322	176	N	127	44
W.N. CENTRAL	615	751	25,829	27,137	190	160	526	414	403	455
Minn.	116	138	5,048	5,478	22	60	134	131	139	149
Iowa	65	63	3,540	3,208	59	48	151	87	76	66
Mo.	287	370	8,609	9,565	21	17	107	33	81	53
N. Dak.	2	6	352	671	9	14	15	15	17	16
S. Dak.	6	13	1,318	1,140	13	6	45	38	46	54
Nebr.	43	51	2,703	2,560	58	13	53	85	32	105
Kans.	96	110	4,259	4,515	8	2	21	25	12	12
S. ATLANTIC	7,336	8,754	91,902	100,718	299	267	272	236	170	149
Del.	131	112	2,101	1,968	5	-	1	6	1	3
Md.	845	973	9,654	9,481	10	11	24	19	1	2
D.C.	500	318	2,321	N	9	7	1	-	U	U
Va.	483	600	10,792	10,618	14	19	53	57	44	49
W. Va.	43	46	1,379	1,313	3	2	13	10	7	5
N.C.	454	631	16,512	16,378	19	11	61	51	53	47
S.C.	553	758	7,866	13,423	-	-	18	17	13	14
Ga.	873	1,235	18,510	24,480	114	111	38	26	26	1
Fla.	3,454	4,081	22,767	23,057	125	106	64	49	25	28
E.S. CENTRAL	1,325	1,508	34,493	34,048	38	24	104	104	78	81
Ky.	147	220	5,770	5,533	5	5	32	30	25	22
Tenn.	555	563	10,572	10,434	10	9	47	48	38	35
Ala.	340	398	11,250	9,396	12	8	8	20	7	20
Miss.	283	327	6,901	8,685	11	2	17	8	8	4
W.S. CENTRAL	2,716	3,452	70,169	66,790	62	70	146	82	186	107
Ark.	127	131	3,981	4,360	9	1	55	11	30	10
La.	461	616	13,353	12,016	8	22	5	11	40	12
Okl.	219	94	5,997	5,905	10	7	13	18	11	18
Tex.	1,909	2,611	46,838	44,509	35	40	73	42	105	67
MOUNTAIN	1,034	1,242	27,143	24,822	116	76	317	210	177	171
Mont.	11	8	960	1,099	10	10	27	14	-	-
Idaho	16	19	1,334	1,267	8	7	48	26	-	21
Wyo.	7	10	546	555	5	1	12	12	2	13
Colo.	238	235	7,948	5,128	56	11	122	83	80	62
N. Mex.	107	67	3,286	3,739	13	31	18	9	14	5
Ariz.	339	605	8,771	9,129	11	10	37	24	27	16
Utah	101	116	1,558	1,580	11	N	43	28	54	39
Nev.	215	182	2,740	2,325	3	6	10	14	-	15
PACIFIC	3,807	4,230	76,470	80,102	182	288	553	269	282	298
Wash.	347	245	9,074	8,509	N	N	174	111	97	137
Oreg.	112	137	3,583	4,467	15	86	126	53	59	61
Calif.	3,247	3,774	60,010	63,376	167	203	215	93	75	90
Alaska	15	13	1,749	1,407	-	-	24	1	1	1
Hawaii	86	61	2,054	2,343	-	-	14	11	10	9
Guam	14	11	-	355	-	-	N	N	U	U
P.R.	762	937	2,805	U	-	-	6	5	U	U
V.I.	25	25	U	U	U	U	U	U	U	U
Amer. Samoa	-	-	U	U	U	U	U	U	U	U
C.N.M.I.	-	-	U	U	U	U	U	U	U	U

N: Not notifiable. U: Unavailable. -: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.

* Individual cases can be reported through both the National Electronic Telecommunications System for Surveillance (NETSS) and the Public Health Laboratory Information System (PHLIS).

¹ Chlamydia refers to genital infections caused by *C. trachomatis*. Totals reported to the Division of STD Prevention, NCHSTP.

² Updated monthly from reports to the Division of HIV/AIDS Prevention—Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention. Last update August 27, 2000.

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending September 23, 2000, and September 25, 1999 (38th Week)

Reporting Area	Gonorrhea		Hepatitis C; Non-A, Non-B		Legionellosis		Lyme Disease	
	Cum. 2000	Cum. 1999	Cum. 2000	Cum. 1999	Cum. 2000	Cum. 1999	Cum. 2000	Cum. 1999
UNITED STATES	238,560	260,041	2,235	2,013	655	691	8,488	11,162
NEW ENGLAND	4,383	4,769	13	13	27	58	2,165	3,433
Maine	61	53	2	2	2	3	-	22
N.H.	73	86	-	-	2	5	50	8
Vt.	48	36	3	5	4	11	18	15
Mass.	1,855	1,825	3	3	9	23	767	654
R.I.	450	419	5	3	4	6	310	350
Conn.	1,896	2,350	-	-	6	10	1,020	2,384
MID. ATLANTIC	25,132	29,018	431	94	134	157	4,829	5,778
Upstate N.Y.	5,103	4,781	52	46	56	41	2,661	2,821
N.Y. City	8,022	9,340	-	-	-	24	10	128
N.J.	4,318	5,654	354	-	9	12	1,189	1,393
Pa.	7,689	9,243	25	48	69	80	969	1,436
E.N. CENTRAL	44,322	50,248	171	712	180	200	292	534
Ohio	11,906	13,140	9	2	63	56	71	37
Ind.	4,369	4,704	1	1	32	29	29	17
Ill.	11,505	16,840	10	40	9	27	11	17
Mich.	13,096	11,245	151	653	34	52	-	11
Wis.	3,446	4,319	-	16	22	36	181	452
W.N. CENTRAL	11,405	11,816	461	161	48	38	227	219
Minn.	2,024	2,061	5	6	3	6	150	119
Iowa	781	769	1	-	12	11	21	21
Mo.	5,428	5,729	440	153	25	14	39	56
N. Dak.	15	66	-	-	-	2	-	1
S. Dak.	220	130	-	-	-	2	-	-
Nebr.	1,056	1,122	6	2	3	5	4	10
Kans.	1,881	1,939	9	-	3	-	12	13
S. ATLANTIC	68,288	75,525	104	136	142	96	789	959
Del.	1,226	1,229	-	-	-	11	135	83
Md.	6,704	7,045	18	19	48	20	435	687
D.C.	1,926	2,748	3	1	3	-	4	3
Va.	6,676	6,885	3	10	25	24	114	94
W. Va.	451	427	13	16	N	N	24	14
N.C.	13,502	14,445	13	31	12	13	39	61
S.C.	10,051	9,927	1	21	4	7	4	4
Ga.	11,900	16,406	3	1	6	-	-	17
Fla.	15,652	16,416	50	37	36	18	34	13
E.S. CENTRAL	25,204	27,115	343	215	26	39	39	79
Ky.	2,536	2,489	30	15	14	14	8	15
Tenn.	8,430	8,362	74	78	10	20	25	44
Ala.	8,718	8,377	7	1	2	3	6	17
Miss.	5,520	7,887	232	121	-	2	-	3
W.S. CENTRAL	36,696	38,253	299	379	18	9	14	40
Ark.	2,226	2,240	9	21	-	1	4	4
La.	9,838	9,591	185	243	9	4	2	7
Okla.	2,636	2,917	7	15	2	3	-	7
Tex.	21,996	23,505	96	100	7	1	8	22
MOUNTAIN	7,278	7,038	273	144	30	35	24	12
Mont.	28	33	4	5	1	-	-	-
Idaho	64	61	3	6	4	3	2	2
Wyo.	38	22	207	37	2	-	9	3
Colo.	2,284	1,777	20	28	11	9	9	2
N. Mex.	727	744	12	26	1	1	-	1
Ariz.	2,913	3,292	14	28	7	5	-	-
Utah	165	156	1	6	4	13	1	2
Nev.	1,059	953	12	8	-	6	3	2
PACIFIC	15,852	16,259	140	159	50	59	109	108
Wash.	1,613	1,460	24	13	15	11	7	6
Oreg.	491	643	24	12	N	N	8	11
Calif.	13,234	13,597	90	134	35	47	92	91
Alaska	240	227	2	-	-	1	2	-
Hawaii	274	332	-	-	-	-	N	N
Guam	-	41	-	1	-	-	-	-
P.R.	496	256	2	-	1	-	N	N
V.I.	U	U	U	U	U	U	U	U
Amer. Samoa	U	U	U	U	U	U	U	U
C.N.M.I.	U	U	U	U	U	U	U	U

N: Not notifiable.

U: Unavailable.

-: No reported cases.

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending September 23, 2000, and September 25, 1999 (38th Week)

Reporting Area	Malaria		Rabies, Animal		Salmonellosis*			
	Cum. 2000	Cum. 1999	Cum. 2000	Cum. 1999	Cum. 2000	Cum. 1999	Cum. 2000	Cum. 1999
UNITED STATES	828	1,049	4,276	4,900	24,982	27,290	21,085	24,863
NEW ENGLAND	37	47	571	655	1,645	1,660	1,618	1,724
Maine	5	3	101	121	99	107	77	87
N.H.	1	2	9	40	104	104	97	109
Vt.	2	4	47	81	95	73	102	64
Mass.	10	14	207	153	936	913	891	934
R.I.	6	4	49	73	107	80	114	130
Conn.	13	20	158	187	304	383	337	400
MID. ATLANTIC	148	299	798	940	2,762	3,630	3,143	3,893
Upstate N.Y.	53	52	548	665	884	932	883	1,012
N.Y. City	50	173	U	U	665	1,099	723	1,109
N.J.	26	43	142	142	568	742	393	858
Pa.	19	31	108	133	645	857	1,144	914
E. N. CENTRAL	96	125	131	140	3,678	3,981	2,261	3,533
Ohio	16	18	45	31	1,030	922	803	830
Ind.	4	16	-	12	473	382	427	361
Ill.	42	53	20	9	1,028	1,261	1	1,197
Mich.	24	31	98	89	666	744	720	736
Wis.	10	7	8	19	481	672	310	409
W. N. CENTRAL	37	48	426	588	1,766	1,702	1,748	1,910
Minn.	13	21	70	81	401	439	498	579
Iowa	3	12	64	124	273	188	185	174
Mo.	7	11	38	24	534	548	665	687
N. Dak.	2	-	100	119	48	38	61	46
S. Dak.	-	-	75	151	75	73	84	100
Nebr.	6	-	1	3	167	152	44	132
Kans.	6	4	78	86	268	264	221	190
S. ATLANTIC	233	262	1,706	1,560	5,598	5,925	3,681	4,835
Del.	4	1	39	34	110	97	97	123
Md.	74	75	312	298	629	628	555	667
D.C.	14	15	-	-	42	61	U	U
Va.	44	55	404	406	749	985	615	835
W. Va.	2	1	90	89	130	127	114	114
N.C.	23	23	409	331	766	903	741	1,034
S.C.	2	11	113	117	510	428	411	363
Ge.	16	21	222	145	1,050	929	1,052	1,229
Fla.	54	60	117	140	1,643	1,754	96	470
E. S. CENTRAL	36	20	150	206	1,601	1,492	1,144	1,078
Ky.	13	7	17	31	286	307	191	206
Tenn.	9	7	78	75	424	418	482	443
Ala.	13	5	56	100	474	422	401	354
Miss.	1	1	-	-	417	345	70	75
W. S. CENTRAL	12	14	68	362	2,026	2,630	2,757	2,024
Ark.	3	2	20	14	498	428	329	128
La.	2	10	-	-	569	569	436	465
Okla.	7	2	48	79	298	324	193	275
Tex.	-	-	-	269	1,110	1,309	1,799	1,166
MOUNTAIN	39	33	195	165	2,130	2,268	1,611	2,001
Mont.	1	4	56	50	70	47	-	1
Idaho	3	3	9	-	92	71	-	73
Wyo.	-	1	43	36	90	46	14	45
Colo.	21	15	-	1	574	599	534	578
N. Mex.	-	2	18	8	179	306	167	242
Ariz.	6	4	58	59	577	671	538	604
Utah	4	4	10	6	382	381	358	409
Nev.	4	3	2	5	206	147	-	49
PACIFIC	190	198	231	284	3,776	4,002	3,122	3,865
Wash.	23	18	-	-	407	462	376	659
Oreg.	33	16	7	3	237	344	285	381
Calif.	129	152	203	274	2,911	2,885	2,271	2,579
Alaska	-	1	21	7	45	36	23	21
Hawaii	5	11	-	-	176	275	167	225
Guam	-	-	-	-	-	31	U	U
P.R.	4	-	63	56	423	403	U	U
V.I.	U	U	U	U	U	U	U	U
Amer. Samoa	U	U	U	U	U	U	U	U
C.N.M.I.	U	U	U	U	U	U	U	U

N: Not notifiable. U: Unavailable. - No reported cases.

* Individual cases can be reported through both the National Electronic Telecommunications System for Surveillance (NETSS) and the Public Health Laboratory Information System (PHLIS).

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending September 23, 2000, and September 25, 1999 (38th Week)

Reporting Area	Shigellosis*				Syphilis (Primary & Secondary)		Tuberculosis	
	NETSS		PHLIS		Cum. 2000	Cum. 1999	Cum. 2000	Cum. 1999
	Cum. 2000	Cum. 1999	Cum. 2000	Cum. 1999				
UNITED STATES	13,925	11,542	7,307	6,961	4,216	4,919	8,814	11,380
NEW ENGLAND	289	600	268	568	58	45	296	309
Maine	10	4	12	-	1	-	9	13
N.H.	4	13	7	14	1	1	14	10
Vt.	4	5	-	3	-	3	4	2
Mass.	205	509	176	482	39	24	176	175
R.I.	22	18	28	17	4	2	27	30
Conn.	44	51	45	52	13	15	66	79
MID. ATLANTIC	1,508	759	929	546	201	220	1,657	1,895
Upstate N.Y.	597	211	177	54	10	17	213	233
N.Y. City	583	253	426	180	96	92	901	979
N.J.	204	174	135	170	35	52	390	393
Pa.	124	121	191	142	60	59	153	290
E.N. CENTRAL	3,013	2,133	874	1,163	796	872	903	1,137
Ohio	277	333	201	111	59	65	205	188
Ind.	1,267	202	126	70	288	301	66	96
Ill.	756	859	2	679	195	320	440	550
Mich.	531	313	500	244	218	152	127	229
Wis.	182	426	45	59	36	34	63	74
W.N. CENTRAL	1,681	914	1,328	614	44	106	331	364
Minn.	508	182	614	195	7	9	111	140
Iowa	393	27	217	29	10	9	27	33
Mo.	513	586	373	296	22	72	132	132
N. Dak.	14	2	30	2	-	-	2	6
S. Dak.	5	11	3	6	-	-	14	12
Nebr.	96	64	9	52	2	6	17	15
Kans.	152	42	82	34	3	10	28	26
S. ATLANTIC	2,072	1,773	678	411	1,418	1,597	1,837	2,330
Del.	15	12	16	7	8	6	-	21
Md.	157	120	82	39	211	295	188	197
D.C.	57	44	U	U	36	37	21	37
Va.	338	94	241	48	95	117	191	221
W. Va.	4	7	3	3	2	3	22	34
N.C.	152	161	129	71	382	376	228	333
S.C.	96	95	74	50	143	196	104	201
Ga.	1,188	172	71	68	273	313	416	450
Fla.	1,065	1,068	62	125	266	254	667	836
E.S. CENTRAL	741	952	359	574	636	865	563	771
Ky.	283	200	53	133	62	78	83	131
Tenn.	268	576	269	380	385	484	250	288
Ala.	48	93	34	52	32	174	230	231
Miss.	144	83	3	9	97	129	-	141
W.S. CENTRAL	1,474	1,903	1,993	814	600	782	845	1,556
Ark.	161	63	44	23	72	47	139	129
La.	80	153	131	84	169	228	73	119
Okl.	87	446	31	138	96	150	99	131
Tex.	1,146	1,241	1,787	569	263	357	534	1,177
MOUNTAIN	870	735	472	500	167	175	360	386
Mont.	7	7	-	-	-	-	10	10
Idaho	42	16	-	9	1	1	9	12
Wyo.	5	3	2	1	1	-	2	3
Colo.	187	129	124	101	7	2	52	52
N. Mex.	104	91	66	70	19	8	29	47
Ariz.	355	372	212	263	133	157	155	165
Utah	64	47	68	50	1	2	32	29
Nev.	106	70	-	6	5	4	71	69
PACIFIC	2,277	1,773	406	1,771	296	257	2,022	2,632
Wash.	357	76	300	80	50	48	171	175
Oreg.	133	63	79	62	5	5	25	81
Calif.	1,747	1,609	-	1,604	240	-	1,660	2,208
Alaska	8	-	3	-	-	-	70	40
Hawaii	32	25	24	25	1	2	96	128
Guam	-	11	U	U	-	-	-	52
P.R.	23	117	U	U	118	124	U	151
V.I.	U	U	U	U	U	U	U	U
Amer. Samoa	U	U	U	U	U	U	U	U
C.N.M.I.	U	U	U	U	U	U	U	U

N: Not notifiable. U: Unavailable. -: No reported cases.

*Individual cases can be reported through both the National Electronic Telecommunications System for Surveillance (NETSS) and the Public Health Laboratory Information System (PHLIS).

TABLE III. Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending September 23, 2000, and September 25, 1999 (38th Week)

Reporting Area	<i>H. influenzae</i> , Invasive		Hepatitis (Viral), By Type				Measles (Rubeola)					
	Cum. 2000 ^a	Cum. 1999	A		B		Indigenous		Imported ^b		Total	
			Cum. 2000	Cum. 1999	Cum. 2000	Cum. 1999	2000	Cum. 2000	2000	Cum. 2000	Cum. 2000	Cum. 1999
UNITED STATES	847	886	8,210	12,011	4,888	5,127	-	48	-	18	66	70
NEW ENGLAND	69	67	245	226	76	116	-	2	-	4	6	11
Maine	1	5	14	7	5	1	-	-	-	-	-	-
N.H.	12	13	18	12	14	12	-	2	-	1	3	1
Vt.	6	5	8	10	6	2	-	-	-	3	3	-
Mass.	33	28	98	80	9	39	-	-	-	-	-	8
R.I.	4	1	19	14	14	26	-	-	-	-	-	-
Conn.	12	15	88	103	28	36	-	-	-	-	-	2
MID. ATLANTIC	139	153	779	854	666	645	-	14	-	5	19	5
Upstate N.Y.	74	62	157	187	100	141	-	9	-	-	9	2
N.Y. City	28	47	238	275	314	195	-	5	-	4	9	3
N.J.	28	39	118	102	83	100	-	-	-	-	-	-
Pa.	9	5	266	290	169	209	U	-	U	-	1	-
E.N. CENTRAL	117	147	992	2,264	520	534	-	8	-	-	8	2
Ohio	44	50	211	504	85	74	-	2	-	-	2	-
Ind.	26	20	74	94	39	34	-	-	-	-	-	1
Ill.	40	60	348	570	91	44	-	4	-	-	4	-
Mich.	7	13	346	1,048	303	355	-	2	-	-	2	1
Wis.	-	4	13	58	1	27	-	-	-	-	-	-
W.N. CENTRAL	51	57	672	581	549	202	-	2	-	-	3	-
Minn.	29	36	170	58	30	38	-	-	-	1	1	-
Iowa	-	2	59	108	26	31	-	2	-	-	2	-
Mo.	13	6	325	350	436	110	-	-	-	-	-	-
N. Dak.	1	1	3	2	2	-	-	-	-	-	-	-
S. Dak.	1	2	1	8	1	1	-	-	-	-	-	-
Nebr.	3	4	28	40	33	15	-	-	-	-	-	-
Kans.	4	6	86	15	21	7	-	-	-	-	-	-
S. ATLANTIC	220	195	1,059	1,391	908	855	-	3	-	-	3	5
Del.	-	-	-	2	-	1	-	-	-	-	-	-
Md.	59	51	176	233	89	118	-	-	-	-	-	-
D.C.	-	4	20	54	27	20	-	-	-	-	-	-
Va.	33	15	115	119	119	69	-	2	-	-	2	3
W. Va.	7	6	51	31	10	22	-	-	-	-	-	-
N.C.	19	28	114	118	182	185	-	-	-	-	-	-
S.C.	11	5	46	30	13	57	-	-	-	-	-	-
Ga.	54	53	190	360	155	113	-	-	-	-	-	-
Fla.	37	33	348	444	313	270	U	1	U	-	1	2
E.S. CENTRAL	39	52	305	301	349	360	-	-	-	-	-	2
Ky.	12	6	36	56	57	33	-	-	-	-	-	2
Tenn.	18	28	111	123	167	178	-	-	-	-	-	-
Ala.	8	15	46	43	44	72	-	-	-	-	-	-
Miss.	1	3	112	79	81	77	-	-	-	-	-	-
W.S. CENTRAL	50	52	1,301	2,407	548	897	-	-	-	-	-	9
Ark.	2	2	104	36	70	57	-	-	-	-	-	2
La.	8	12	31	179	52	143	-	-	-	-	-	-
Okla.	36	34	212	398	116	115	-	-	-	-	-	-
Tex.	2	4	954	1,794	310	582	-	-	-	-	-	7
MOUNTAIN	78	74	735	961	384	446	-	11	-	1	12	1
Mont.	1	2	5	17	7	17	-	-	-	-	-	-
Idaho	3	1	39	33	7	23	-	-	-	-	-	-
Wyo.	1	1	30	7	24	12	U	-	U	-	-	-
Colo.	11	12	156	178	68	76	-	1	-	1	2	-
N. Mex.	17	18	60	40	76	142	-	-	-	-	-	-
Ariz.	37	32	366	538	150	110	-	-	-	-	-	1
Utah	7	5	41	38	17	26	-	3	-	-	3	-
Nev.	1	3	49	110	35	40	-	7	-	-	7	-
PACIFIC	85	89	2,122	3,026	888	1,072	-	8	-	7	15	36
Wash.	5	3	216	240	80	53	-	2	-	1	3	5
Oreg.	23	30	144	195	80	83	-	-	-	-	-	12
Calif.	28	43	1,740	2,564	710	910	-	5	-	3	8	17
Alaska	6	5	9	9	8	14	-	1	-	-	1	-
Hawaii	23	8	13	18	10	12	-	-	-	3	3	1
Guam	-	-	-	1	-	2	U	-	U	-	-	-
P.R.	3	2	188	233	185	170	-	-	-	-	-	-
V.I.	U	U	U	U	U	U	U	U	U	U	U	U
Amer. Samoa	U	U	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	U	U	U	U	U	U	U	U	U	U	U	U

N: Not notifiable. U: Unavailable. -: No reported cases.

^aFor imported measles, cases include only those resulting from importation from other countries.

^bOf 172 cases among children aged <5 years, serotype was reported for 74 and of those, 20 were type b.

TABLE III. (Cont'd) Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending September 23, 2000, and September 25, 1999 (38th Week)

Reporting Area	Meningococcal Disease		Mumps			Pertussis			Rubella		
	Cum. 2000	Cum. 1999	2000	Cum. 2000	Cum. 1999	2000	Cum. 2000	Cum. 1999	2000	Cum. 2000	Cum. 1999
UNITED STATES	1,548	1,825	5	265	271	140	4,292	4,529	-	123	233
NEW ENGLAND	96	84	-	4	6	4	959	539	-	12	7
Maine	9	5	-	-	-	1	33	-	-	-	-
N.H.	11	11	-	-	1	-	83	78	-	2	-
Vt.	2	4	-	-	1	1	179	50	-	-	-
Mass.	55	48	-	1	4	2	611	372	-	8	7
R.I.	8	4	-	1	-	-	14	24	-	1	-
Conn.	11	12	-	2	-	-	39	15	-	1	-
MID. ATLANTIC	149	169	-	19	35	10	390	739	-	9	30
Upstate N.Y.	50	47	-	8	7	10	186	580	-	2	18
N.Y. City	30	49	-	4	10	-	44	42	-	7	5
N.J.	33	39	-	3	1	-	34	20	-	-	4
Pa.	36	34	U	4	17	U	126	97	U	-	3
E.N. CENTRAL	264	330	-	27	36	16	504	396	-	1	2
Ohio	69	114	-	7	11	10	265	156	-	-	-
Ind.	37	47	-	1	4	5	75	54	-	-	1
Ill.	64	86	-	6	9	1	54	67	-	1	-
Mich.	74	50	-	13	8	-	55	41	-	-	-
Wis.	20	33	-	-	4	-	55	78	-	-	-
W.N. CENTRAL	136	178	1	18	10	27	367	298	-	1	126
Minn.	17	39	-	-	1	17	217	133	-	-	5
Iowa	25	32	1	7	5	2	40	46	-	-	30
Mo.	73	64	-	5	1	-	49	57	-	-	2
N. Dak.	2	3	-	-	-	-	3	4	-	-	-
S. Dak.	5	11	-	-	-	-	3	5	-	-	-
Nebr.	7	9	-	3	-	8	24	4	-	1	89
Kans.	7	20	-	3	3	-	31	49	-	-	-
S. ATLANTIC	251	306	1	40	40	5	349	324	-	73	35
Del.	-	8	-	-	-	-	8	4	-	-	-
Md.	24	44	1	10	3	1	81	102	-	-	1
D.C.	-	3	-	-	2	-	3	-	-	-	-
Va.	35	40	-	8	8	4	66	17	-	-	-
W. Va.	11	5	-	-	-	-	1	2	-	-	-
N.C.	32	35	-	5	8	-	77	86	-	64	34
S.C.	19	38	-	10	4	-	23	15	-	7	-
Ga.	38	51	-	2	4	-	34	33	-	-	-
Fla.	92	82	U	5	11	U	56	66	U	2	-
E.S. CENTRAL	107	128	-	7	11	1	86	78	-	5	2
Ky.	24	26	-	1	-	-	41	22	-	1	-
Tenn.	44	53	-	2	-	1	26	34	-	1	-
Ala.	29	30	-	2	8	-	18	19	-	3	2
Miss.	10	19	-	2	3	-	1	3	-	-	-
W.S. CENTRAL	105	183	-	23	36	29	256	166	-	4	11
Ark.	12	31	-	2	-	1	31	19	-	-	3
La.	29	55	-	3	10	-	3	9	-	-	-
Okla.	23	27	-	-	1	-	14	32	-	-	1
Tex.	41	70	-	18	25	26	208	106	-	4	7
MOUNTAIN	109	110	1	19	14	33	584	544	-	2	16
Mont.	4	2	-	1	-	1	33	2	-	-	-
Idaho	6	8	-	-	1	-	52	131	-	-	-
Wyo.	-	4	U	2	-	U	6	2	U	-	-
Colo.	30	30	-	1	5	18	321	204	-	1	1
N. Mex.	7	13	-	1	N	1	77	77	-	-	-
Ariz.	52	33	-	4	-	11	69	69	-	1	13
Utah	7	13	-	4	3	1	16	54	-	-	1
Nev.	3	7	1	6	5	1	10	5	-	-	1
PACIFIC	331	337	2	108	83	15	797	1,445	-	16	4
Wash.	43	56	2	10	2	14	286	570	-	7	-
Oreg.	56	58	N	N	N	1	101	40	-	-	-
Calif.	218	211	-	77	68	-	362	799	-	9	4
Alaska	7	6	-	7	1	-	19	4	-	-	-
Hawaii	8	6	-	14	12	-	29	32	-	-	-
Guam	-	1	U	-	1	U	-	2	U	-	-
P.R.	8	10	-	-	-	1	6	21	-	-	-
V.I.	U	U	U	U	U	U	U	U	U	U	U
Amer. Samoa	U	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	U	U	U	U	U	U	U	U	U	U	U

N: Not notifiable.

U: Unavailable.

-: No reported cases.

TABLE IV. Deaths in 122 U.S. cities,* week ending
September 23, 2000 (38th Week)

Reporting Area	All Causes, By Age (Years)						P&I/ Total	Reporting Area	All Causes, By Age (Years)						P&I/ Total	
	All Ages	<65	45-64	25-44	1-24	<1			All Ages	<65	45-64	25-44	1-24	<1		
NEW ENGLAND	533	379	100	38	5	11	55	S. ATLANTIC	1,038	681	205	95	26	31	60	
Boston, Mass.	142	94	24	18	1	5	10	Atlanta, Ga.	U	U	U	U	U	U	U	
Bridgeport, Conn.	42	27	11	3	1	-	3	Baltimore, Md.	172	105	35	20	9	3	12	
Cambridge, Mass.	10	6	1	2	1	-	-	Charlotte, N.C.	97	66	19	8	2	2	6	
Fall River, Mass.	25	20	4	1	-	-	2	Jacksonville, Fla.	142	89	29	16	4	4	18	
Hartford, Conn.	55	33	16	6	-	-	7	Miami, Fla.	104	71	17	13	2	1	8	
Lowell, Mass.	14	9	3	2	-	-	2	Norfolk, Va.	65	45	11	6	-	3	2	
Lynn, Mass.	17	15	2	-	-	-	2	Richmond, Va.	66	35	15	8	2	6	4	
New Bedford, Mass.	23	19	2	2	-	-	1	Savannah, Ga.	54	42	11	-	-	1	-	
New Haven, Conn.	33	24	7	-	-	2	3	St. Petersburg, Fla.	55	41	8	2	2	2	1	
Providence, R.I.	41	31	7	1	-	2	6	Tampa, Fla.	177	127	34	11	2	3	8	
Somerville, Mass.	8	5	2	-	1	-	-	Washington, D.C.	100	56	24	11	3	6	1	
Springfield, Mass.	32	26	4	1	1	-	5	Wilmington, Del.	6	4	2	-	-	-	-	
Waterbury, Conn.	33	26	6	1	-	-	2	E.S. CENTRAL	911	621	187	56	29	18	65	
Worcester, Mass.	58	44	11	1	-	2	12	Birmingham, Ala.	167	116	41	5	4	1	16	
MID. ATLANTIC	2,068	1,439	400	141	38	50	108	Chattanooga, Tenn.	62	39	15	5	2	1	2	
Albany, N.Y.	53	37	14	1	-	1	6	Knoxville, Tenn.	92	67	18	4	2	1	3	
Allentown, Pa.	23	20	1	2	-	-	2	Lexington, Ky.	67	41	10	8	4	4	6	
Buffalo, N.Y.	111	80	27	2	2	-	11	Memphis, Tenn.	226	151	51	12	9	3	21	
Camden, N.J.	31	17	6	6	1	1	-	Mobile, Ala.	92	65	16	6	2	3	5	
Elizabeth, N.J.	24	18	3	1	1	1	-	Montgomery, Ala.	54	43	6	3	-	2	3	
Erie, Pa.	30	21	7	2	-	-	1	Nashville, Tenn.	151	99	30	13	6	3	9	
Jersey City, N.J.	41	28	5	5	1	2	-	W.S. CENTRAL	1,516	976	301	135	71	31	97	
New York City, N.Y.	1,071	729	214	79	19	30	35	Austin, Tex.	81	55	10	10	5	1	5	
Newark, N.J.	46	18	12	11	2	2	1	Baton Rouge, La.	60	37	13	8	-	2	3	
Paterson, N.J.	25	16	6	1	3	-	5	Corpus Christi, Tex.	53	34	15	1	3	2	-	
Philadelphia, Pa.	243	178	45	13	5	2	14	Dallas, Tex.	216	135	41	20	16	4	20	
Pittsburgh, Pa.	64	42	13	5	2	2	1	El Paso, Tex.	71	54	14	1	1	1	-	
Reading, Pa.	28	22	4	2	-	-	2	Ft. Worth, Tex.	94	66	19	5	1	3	8	
Rochester, N.Y.	123	96	19	3	2	3	10	Houston, Tex.	444	255	89	56	33	11	29	
Schenectady, N.Y.	18	14	3	1	-	-	3	Little Rock, Ark.	63	46	10	6	1	-	4	
Scranton, Pa.	32	24	6	2	-	-	-	New Orleans, La.	46	29	7	4	4	-	-	
Syracuse, N.Y.	70	51	10	3	-	6	10	San Antonio, Tex.	228	154	51	14	2	7	14	
Trenton, N.J.	19	13	4	2	-	-	1	Shreveport, La.	50	34	9	3	3	1	3	
Utica, N.Y.	15	11	1	-	-	5	1	Tulsa, Okla.	110	77	23	7	2	1	9	
Yonkers, N.Y.	U	U	U	U	U	U	U	MOUNTAIN	1,087	733	217	83	30	24	76	
E.N. CENTRAL	2,020	1,360	401	149	59	51	142	Albuquerque, N.M.	162	105	31	12	11	3	6	
Akron, Ohio	47	33	7	1	2	4	2	Boise, Idaho	38	34	3	-	-	1	4	
Canton, Ohio	35	23	6	3	1	2	3	Colo. Springs, Colo.	39	29	6	3	1	-	3	
Chicago, Ill.	356	223	74	42	11	6	39	Denver, Colo.	110	60	31	11	4	4	9	
Cincinnati, Ohio	84	52	19	7	2	4	9	Las Vegas, Nev.	243	165	54	16	2	6	19	
Cleveland, Ohio	137	89	27	14	4	3	3	Ogden, Utah	36	31	4	-	1	-	4	
Columbus, Ohio	181	135	37	4	-	5	14	Phoenix, Ariz.	162	103	32	16	6	5	13	
Dayton, Ohio	96	62	21	7	3	2	4	Pueblo, Colo.	29	20	5	3	1	-	2	
Detroit, Mich.	201	105	57	22	10	7	22	Salt Lake City, Utah	108	67	26	8	4	3	9	
Evansville, Ind.	37	27	6	1	3	-	-	Tucson, Ariz.	160	119	25	14	-	2	7	
Fort Wayne, Ind.	65	46	13	2	1	3	2	PACIFIC	1,819	1,282	341	109	58	25	149	
Gary, Ind.	21	9	5	4	2	1	2	Berkeley, Calif.	12	5	4	3	-	-	-	
Grand Rapids, Mich.	81	61	9	6	2	3	7	Fresno, Calif.	89	61	17	7	4	-	6	
Indianapolis, Ind.	189	125	38	14	7	5	15	Glendale, Calif.	25	16	6	3	-	-	-	
Lansing, Mich.	51	38	8	1	3	1	1	Honolulu, Hawaii	84	60	13	9	2	-	4	
Milwaukee, Wis.	121	86	22	9	3	1	11	Long Beach, Calif.	61	37	18	2	3	1	5	
Peoria, Ill.	57	46	5	1	2	1	4	Los Angeles, Calif.	527	376	95	27	19	10	37	
Rockford, Ill.	52	38	11	1	1	-	-	Pasadena, Calif.	30	21	7	1	-	1	4	
South Bend, Ind.	76	56	13	5	1	1	2	Portland, Oreg.	132	87	29	10	3	3	6	
Toledo, Ohio	88	65	18	3	1	1	2	Sacramento, Calif.	202	146	38	7	6	4	19	
Youngstown, Ohio	46	39	5	2	-	-	-	San Diego, Calif.	151	106	26	10	7	2	19	
W.N. CENTRAL	737	528	118	47	20	24	43	San Francisco, Calif.	U	U	U	U	U	U	U	
Des Moines, Iowa	31	19	7	3	1	1	2	San Jose, Calif.	199	154	26	13	2	4	20	
Duluth, Minn.	27	19	5	2	1	-	-	Santa Cruz, Calif.	34	29	4	1	-	-	3	
Kansas City, Kans.	30	19	5	3	2	1	2	Seattle, Wash.	135	90	31	8	6	-	11	
Kansas City, Mo.	111	77	16	8	7	3	8	Spokane, Wash.	33	17	10	5	1	-	8	
Lincoln, Nebr.	29	24	2	2	-	1	1	Tacoma, Wash.	105	77	17	3	5	-	7	
Minneapolis, Minn.	114	85	14	10	1	4	9	TOTAL	11,729 ¹	7,999	2,270	853	336	265	795	
Omaha, Nebr.	100	74	18	3	3	2	13									
St. Louis, Mo.	110	62	27	8	4	9	-									
St. Paul, Minn.	114	93	14	5	-	2	6									
Wichita, Kans.	71	56	10	3	1	1	2									

U: Unavailable. -/No reported cases.

*Mortality data in this table are voluntarily reported from 122 cities in the United States, most of which have populations of $\geq 100,000$. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.

¹Pneumonia and influenza.

²Because of changes in reporting methods in this Pennsylvania city, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

³Total includes unknown ages.

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